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## RESEARCH METHODOLOGY AND ACCOUNTING THEORY FORMATION\*

CARL THOMAS DEVINE
Visiting Professor, University of Chicago

Lacit year numerous candidates for degrees and for academic promotion write papers related in some way to the field of accounting. These papers represent research, broadly interpreted; they range in scope from tabulations prepared from the results of relatively simple questionnaires and presented with no pretense of interpretation or analysis to the preparation of "operationally meaningful hypotheses" and the construction of complicated models of possible business behavior.

This paper examines some methods of inquiry and suggests certain types of investigation that seem to be appropriate for the study of accounting. More specifically, a tentative framework is set forth to indicate some possible levels of abstraction at which research in accounting could be undertaken. Such a framework, to be complete, would need to cover an area that ranges from the simplest aspects of fact collection to the philosophical boundaries of concept formation. Clearly such completeness is beyond the scope of this general paper, but to a limited degree the . following broad areas are mentioned and related, where feasible, to accounting investigation:

- 1. Logical structure and deductive systems;
- 2, Measurement and induction;

- 13. Behavioral relations;
- 4. Welfare and normative responsibilities.

Logical Structure and Deductive Systems. One of the outstanding developments of the twentieth century has been the expansion of the field of logic. One of the more important advances of the social sciences in the next few decades may well result from attempts to make use of these developments. To date social scientists have probably shown greater maturity in the use of inductive logic and statistical weapons, but their respect grows for the importance of deductive methods in scientific inquiry.

Papandreou has recently discussed the nature of the deductive process and its application to the social sciences. His requirements for a logical calculus are essentially those of Carnap and are set forth substantially as follows:

- A list of symbols (or marks) which themselves are devoid of meaning;
- A list of rules of permissible sequences of such symbols ("rules of formation" or "initial formulas");
- 3. A statement of the rules of deductive inference by which the initial formulae of (2) may be transformed.

<sup>•</sup> This is the second in a series of four papers based on the work of the Committee on Accounting Theory during the two years ended December 31, 1959. It represents the views of the author and is in no sense a committee report.